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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/027,173	12/20/2001	Masayuki Yurimoto	7217/66127	9743

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EXAMINER	
NGUYEN, PHUNG	
ART UNIT	PAPER NUMBER
2632	

DATE MAILED: 04/06/2004 14

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/027,173	YURIMOTO ET AL.	
	Examiner	Art Unit	
	Phung T Nguyen	2632	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 March 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-3,5-11 and 13-16* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3,5-11 and 13-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-3, 8-11, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Asami et al. [U.S. Pat. 6,252,520] in view of Watanabe [U.S. Pat. 5,450,057]

Regarding claim 1: Asami et al. disclose a mobile unit communication apparatus providing a relayed signal when error detected which comprises all subject matter as follows:

a. detecting means for detecting position information of the transmitting vehicle (col. 2, lines 57-65);

b. transmitting means for transmitting the position information and the alarm information (col. 3, lines 19-32);

c. receiving means for receiving the position information and the alarm information transmitted from the transmitting vehicle (col. 3, lines 51-54);

d. means for determining a current position of the receiving vehicle (col. 2, line 57-65);

e. output means for outputting the alarm information to a user of the receiving vehicle (col. 3, lines 46-51); and

f. control means for performing control the alarm information including means for calculating a distance between the receiving vehicle and the transmitting vehicle based on the current position of the receiving vehicle (col. 5, lines 12-22).

g. Asami et al. disclose the controller issuing a hazard alarm when the relative distance is shorter than the predetermined distance "b" (col. 5, lines 19-34) but do not directly disclose the predetermined distance less than an effective range of the transmitting means as claimed. However, the hazard alarm of Asami et al. is only issued when the relative distance is shorter than the predetermined distance "b". This excludes other vehicles within the transmission range of the transmitter but outside of the effective range. Therefore, it would have been obvious to the one of ordinary skill in the art at the time the invention was made to readily recognize that the relative distance is a predetermined distance in order to generate the alarm.

h. Asami et al. do not disclose transmitting and receiving type information specifying the type of the alarm information and changing the output of the alarm information according to the specified type of the alarm information. However, Watanabe discloses transmitting type information specifying a type of the alarm information; receiving type information; and changing the output of the alarm information from the output means according to the specified type of the alarm information (col. 1, lines 16-20, and col. 2, lines 51-57). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Asami et al. and Watanabe because they both teach a system detecting an object around a vehicle and outputting signal indicative of position of the detected object. Watanabe's teaching of changing the output of the alarm information from the output means according to the specified type of the alarm information would enhance the system of Asami et al. by allowing the driver of the vehicle can distinguish the degree of danger.

Regarding claim 2: Asami et al. discloses the control means determines that the transmitting vehicle is present within the predetermined distance (col. 4, lines 29-55) except that

the control means changes a direction of output of the alarm information from the output means according to a direction of the transmitting vehicle. However, Watanabe discloses a stereophonic warning apparatus comprising the controlling means controls an output level of each of the speakers 130 and 131 (figure 1, col. 1, lines 16-20 and lines 53-59, and col. 4, lines 10-30) according to the direction of the vehicle. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the teaching of Watanabe in the system of Asami et al. to change the direction of output of the alarm information in order to perceive the direction of the vehicle that has transmitted the alarm sound which is an advantage.

Regarding claim 3: Watanabe discloses the control means changes an output level of the alarm information from the output means according to a distance between the receiving vehicle and the transmitting vehicle (col. 4, lines 15-17).

Regarding claim 8: Watanabe discloses transmitting a vehicle speed; receiving the vehicle speed; and the control means changes an output level of the alarm information according to the vehicle speed (col. 4, lines 10-15).

Regarding claim 9: All the claimed subject matter is already discussed in respect to claim 1 above. Asami et al. also teach inputting means for inputting alarm information (col. 7, lines 62-67).

Regarding claim 10: Watanabe discloses calculating a direction of the second vehicle with respect to the first vehicle; and the output control means changes a direction of output of the alarm information according to the calculated direction (col. 4, lines 10-45).

Regarding claim 11: Watanabe discloses the output control means changes an output level of the alarm information according to the distance (col. 4, lines 15-17).

Regarding claim 16: Watanabe discloses transmitting means adds a vehicle speed of the first vehicle to the alarm information; receiving means receives a signal including the vehicle speed form the second vehicle; and output control means changes the predetermined distance for determining according to the vehicle speed (col. 4, lines 10-45).

3. Claims 5 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Asami et al. in view of Watanabe and further in view of Sadler [U.S. Pat. 3,949,300].

Regarding claim 5: Watanabe discloses the type information specifying the type of the alarm information (col. 1, lines 53-59) but the combination fails to disclose the alarm information specifies at least a horn signal as claimed. However, Sadler discloses an emergency radio frequency warning device comprising the alarm information specifies at least a horn signal (col. 2, lines 20-34). Therefore, it would have been obvious to the skilled artisan to employ the alarm type (horn signal) of Sadler into the system of Asami et al. and Watanabe to reproduce the originating sound, thereby warning the driver of potential danger.

Regarding claim 13: Refer to claim 5 above.

4. Claims 6 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Asami et al. in view of Watanabe and further in view of Reeves [U.S. Pat. 6,211,778].

Regarding claim 6: Asami et al. disclose the radio warning signal is transmitted from the vehicle to any receivers that might be operating within the predetermined distance (col. 4, lines 29-42). The combination does not show changing the predetermined distance according to the information specifying the alarm information as claimed. However, changing the predetermined

distance according to the alarm information is known in the art as taught by Reeves (col. 3, lines 66-67, and col. 4, lines 1-14). Therefore, it would have been obvious to one of ordinary skill in the art to use the teaching of Reeves into the system of Asami et al. and Watanabe to change the predetermined distance according to the alarm information because increasing the intensity of the audible warning as the distance between the transmitter vehicle and receiver vehicle decreases would allow the driver to advantageously sense the approach distance of the transmitter vehicle.

Regarding claim 14: Asami et al. discloses the radio warning signal is transmitted from the vehicle to any receivers that might be operating within the predetermined distance (col. 4, lines 29-42). The combination does not show changing the predetermined distance for determining according to the type of the alarm information as claimed. However, changing the predetermined distance according to the type of the alarm information is known in the art as taught by Reeves (col. 3, lines 66-67, and col. 4, lines 1-14). Therefore, it would have been obvious to one of ordinary skill in the art to use the teaching of Reeves into the system of Asami et al. and Wanatabe to change the predetermined distance according to the alarm information because increasing the intensity of the audible warning as the distance between the transmitter vehicle and receiver vehicle decreases would allow the driver to advantageously sense the approach distance of the transmitter vehicle.

5. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Asami et al. in view of Watanabe and Reeves and further in view of Hayashida et al. [U.S. Pat. 5,926,118].

Regarding claim 7: Reeves discloses changing the predetermined distance according to the alarm information as discussed in claim 6 above but the combination fails to disclose the

predetermined distance according to a type of a road where the receiving vehicle is located. However, Hayashida et al. disclose a vehicular navigation apparatus comprising a predetermined distance may be set in accordance with the type of the currently traveled road (figure 10, col. 9, lines 35-47, and col. 10, lines 25-30). Therefore, it would have been obvious to the skilled artisan to use the technique of Hayashida et al. in the system of the combination to set the predetermined distance according to the type of a road in order to extend the use of the device.

6. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Asami et al. in view of Watanabe and further in view of Hayashida et al. [U.S. Pat. 5,926,118].

Regarding claim 15: Asami et al. and Watanabe do not disclose the claimed predetermined distance according to a type of a road where the first vehicle is located. However, Hayashida et al. disclose a vehicular navigation apparatus comprising a predetermined distance may be set in accordance with the type of the currently traveled road (figure 10, col. 9, lines 35-47, and col. 10, lines 25-30). Therefore, it would have been obvious to the skilled artisan to use the technique of Hayashida et al. in the system of Asami et al. and Watanabe to set the predetermined distance according to the type of a road in order to extend the use of the device.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Smith et al. [U.S. Pat. 6,529,831] disclose an emergency vehicle locator and proximity warning system.

b. Shirai et al. [U.S. Pat. 5,751,211] disclose an obstacle warning system for a vehicle.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phung T Nguyen whose telephone number is 703-308-6252. The examiner can normally be reached on 8:00am-5:30pm Mon thru. Friday, with alternate Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel J. Wu can be reached on 703-308-6730. The fax numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-308-9051 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4700.

Examiner: Phung Nguyen

Date: March 30, 2004